

Report to the Board of Supervisors

Status of The Street Damage Restoration Fee





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Prepared by

Department of Public Works

Bureau of Street Use and Mapping

Street Construction Coordination Center

December 20, 1999

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I. INTRODUCTION

Legislation Adopted. On December 13, 1998 an ordinance amending the Public Works Code ("Code") by adding Article 2.4 (Excavating in the Public Right-of-Way) became effective. Section 2.4.44 of the Code established the "Street Damage Restoration Fee" ("Fee") to recover the increased repaving and reconstruction costs caused by excavation in City streets.

Director's Report Required. Section 2.4.45 of the Code requires the Director of the Department of Public Works ("DPW") to submit a report to the Board "[w]ithin one (1) year after adoption of the Street Damage Restoration Fee, and every three (3) years thereafter..." The report shall "review the proceeds of the Street Damage Restoration Fee, the costs of repaving and reconstruction reasonably attributed to Excavation in City streets, and any other new information that shall become available..." If appropriate, "the Director shall recommend to the Board any necessary adjustments to the Fee...."

This Report is being submitted to the Board pursuant to Section 2.4.45 of the Code.

Engineering and Economic Reports. The Department of Public Works ("DPW") commissioned two studies, an Engineering Report and an Economic Report, to determine whether it was appropriate to adopt the fee. A panel of six engineers and a statistician prepared the Engineering Report. It demonstrates that excavation damages streets by reducing their service life. The Economic Report quantifies the repaving and reconstruction costs incurred by the City as the result of excavation in City streets. The Economic Report demonstrates that the costs to the City caused by excavation are substantially higher that the amount of the Fee imposed on excavators. This Report includes an update to the economic report.

Proceeds. The Report contains information on the Fees collected by DPW from January 1, 1999 through November 30, 1999. During this period DPW has deposited approximately \$198,100 into the Street Damage Restoration Fund ("Fund"). DPW anticipates collecting a total of approximately \$400,000 in Fees for excavation conducted in 1999.

DPW has not yet expended any of the Fee Funds. It anticipates beginning to pave streets using monies from the Fee Fund in the spring of 2000. DPW will use the Fee Funds to first pave those blocks with a condition score of less than 53 and the highest number of street cuts.

Repaving and Reconstruction Costs. The Economic Report demonstrated that the costs to the City caused by excavation are substantially higher that the amount of the Fee imposed on excavators. This Report includes an update to the Economic Report. The update demonstrates that it is still the case that the costs caused by excavation are higher than the amount of the Fee.

Adjustments to Fee. As demonstrated in this Report, the Fee continues to cover only a fraction of the costs incurred by the City as the result of excavation in City streets. More accurate cost estimates will be available after DPW has completed its bi-annual survey of the condition of City streets. Consequently, though DPW does not recommend changes to the Fee at this time, it may recommend such changes to the Board after completion of the survey.

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II. OVERVIEW OF THE STREET DAMAGE RESTORATION FEE

Amount of Fee. The Street Damage Restoration Fee ("Fee") paid by excavators is calculated based upon the age of the block being excavated and the square feet of excavation proposed, as follows:

Age of Block (Years Since Last Resurfacing)	Fee Amount
0-5 years	\$3.50 per square foot of Excavation
6-10 years	\$3.00 per square foot of Excavation
11-15 years	\$2.00 per square foot of Excavation
15-20 years	\$1.00 per square foot of Excavation

If the age of the block is not known and the pavement condition score is greater than 53, the excavator is charged the rate specified for streets 15-20 years old.

Exceptions. Exceptions to the fee include the following:

- 1. To encourage coordination of excavation with the Department's repaying schedule, no fee is assessed for excavation in a block scheduled to be repayed in two years or less;
- 2. To encourage excavation in older blocks and those with lower pavement condition scores, no Fee is assessed for excavation in blocks with a recorded pavement condition score of 53 or less, or a recorded age of greater than 20 years.
- 3. The Fee is waived when an excavator proposes to reconstruct and repave the entire block affected by the excavation, or any and all traffic lanes affected by the excavation;
- 4. The Fee may be waived if the excavator proposes to install conduit for City use or control or made available to future excavators such that future Excavation is permanently avoided.
- 5. No Fee is charged for excavation in sidewalks, concrete blocks, or unaccepted blocks.
- 6. No fee is charged for excavation performed to relocate utility facilities to accommodate the City's use of the block.

Payment. Excavators are billed monthly for the Fees, in conjunction with billing for their permit fees.

Deposits to Special Fund. Collected Fees are deposited into a special fund, the Street Damage Restoration Fund ("Fund"). The monies collected may only be used to recover the increased costs of repaying and reconstruction reasonably attributed to the impact of excavation in City streets.



For the period January 1, 1999 through November 30, 1999 DPW has deposited approximately \$198,100 into the Fund. DPW anticipates collecting a total of approximately \$400,000 in Fees for excavation conducted in 1999. The discrepancy between Fees collected to date and the projected total reflects Fees billed to excavators that have not yet been paid.

Prior to adoption of the Fee, DPW projected that it would collect approximately \$1.3 million annually from the Fee. The anticipated collection of approximately \$400,000 for excavation in 1999 represents only about 31% of the projected \$1.3 million.

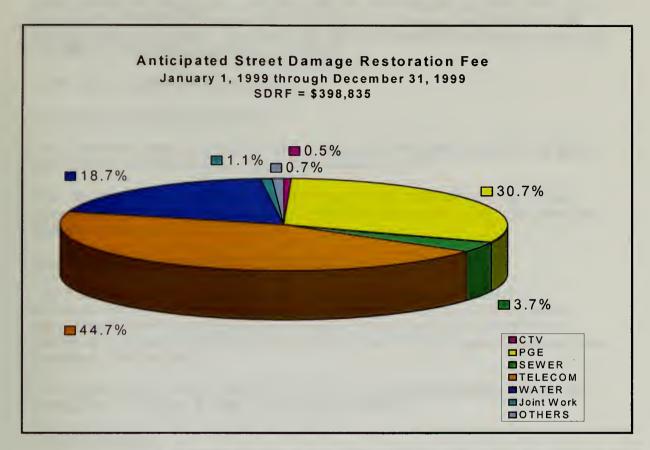
There are a number of reasons why the \$1.3 million projection was inaccurate. The projection estimated that DPW would collect an average fee of \$2.00 per square foot for approximately 650,000 square feet of excavation. This projection overestimated the amount of excavation that would be subject to the Fee. For example, it did not take exceptions from the Fee, such as excavation in concrete streets, into account. The projection also overestimated the average fee that would be collected.

Preliminary review of excavations permitted from January 1, 1999 through November 30, 1999 indicates that approximately 525,000 square feet will be excavated by the end of 1999, approximately 19% less than the projected 650,000. Of the 525,000 feet of excavation conducted in 1999, approximately 151,000 square feet of excavation (or 29%) are projected to qualify for an exception to the Fee. Consequently, only 374,000 square feet are projected to be subject to the Fee, 57% of the originally projected 650,000 square feet of excavation that would be subject to the Fee. Additionally, the average Fee collected thus far has been \$1.07 per square foot, rather than then the projected \$2.00.

III. FEE PAYMENTS BROKEN DOWN BY EXCAVATOR

The following pie chart shows which excavators are projected to be responsible for the Fee payments, the amounts they are projected to pay, and the amount of square feet projected to be excavated that are subject to the Fee.





				E	XCAVATOR			
	TOTAL	CTV	PGE	SEWER	TELECOM	WATER	Joint Work*	Others
Fee	\$ 398,835	\$ 2,004	\$ 122,280	\$ 14,647	\$178,396	\$ 74,450	\$ 4,251	\$ 2,807
% of Fee	100.0%	0.5%	30.7%	3.7%	44.7%	18.7%	1.1%	0.7%
Sq.Ft. of AC	374,242	2,692	113,083	22,969	165,203	64,899	2,337	3,059
% of Sq.Ft.	100.0%	0.7%	30.2%	6.1%	44.1%	17.3%	0.6%	0.8%

Joint Work represents excavation performed by City Departments under one permit.

IV. ECONOMIC REPORT UPDATE

The Economic Report used two different methods to determine the amount of excess paving required as a result of the damage caused by street cuts. It then calculated the costs the City incurs to repave these blocks sooner than it would have but for excavation. This cost is allocated to the entities that excavate in City streets through the Fee. The Fee is assessed on a per square foot basis and averages the costs over a 26 year period.

The Economic Report concluded that, regardless of the method employed, a fee of \$5.37 per square foot of excavation reflects the *minimum* cost to the City of excavation. It suggested that a higher fee could be justified.

The Economic Report was designed to be updated periodically. Some figures from the Economic Report can be updated now, while others will not be available until next year. For example, the Economic Report relies upon the 1998



database of the DPW Pavement Management and Mapping System ("PMMS") to compute the number of excess blocks requiring repaving. The PMMS is only updated every two years. Consequently, these calculations cannot be computed until the 2000 PMMS database is available.

DPW can update the following figures:

Average Cost of Repaving a Block:

The Economic Report calculated the average cost of repaving a block as \$2.14 per square foot, based upon Fiscal Year 1996-97 costs.

The average cost of repaving a block in Fiscal Year 1997-98 was \$2.29 per square foot. In Fiscal Year 1998-99 it was \$2.49 per square foot. See attached Exhibit 1.

Discounted Total Annual Cost of Repaving

The Economic Report discounted the total cost of repaving blocks due to excavation by annualizing this amount over 26 years using a 5.58% discount rate. This 5.58% discount rate was based upon the rate a City Department earned on deposits with the City Treasurer at the time the Economic Report was prepared. October 1998.

The deposit rate for Fiscal Year 1998-99 paid to City Departments by the City Treasurer's office was 5.48%. See attached Exhibit 2.

Yearly Excavation

The Economic Report relied upon a three year historical average of the number of square feet excavated in Fiscal Years 1995-96, 1996-97, and 1997-98 in order to project the number of square feet likely to be excavated in the coming year. The Economic Report calculated this average to be 610,400 square feet.

The number of square feet excavated in Fiscal Year 1998-99 (excluding sidewalk excavations) was 397,772. The three year rolling average is therefore 549,176 square feet. See attached Exhibit 3.

Results of Update to Economic Report. Previously, the Economic Report resulted in the following calculations:

- For the Excess Failed Streets Method, the Economic Report concluded that excavation in City streets costs the City between \$5.37 and \$8.38 per square foot.
- For the Pavement Management Mapping System (PMMS) Method, the Economic Report concluded that excavation in City streets costs the City between \$5.49 and \$7.27 per square foot.

Replacing the above-listed figures in the calculations made in the Economic Report results in the following changes:

At the 1997-98 cost of \$2.29 per square foot to repave a block:



- For the Excess Failed Streets Method, excavation in City streets costs the City between \$6.33 and \$9.87 per square foot. See attached Exhibit 4.
- For the PMMS Method, excavation in City streets costs the City between \$6.47 and \$8.56 per square foot. See attached Exhibit 5.

At the 1998-99 cost of \$2.49 per square foot to repave a block:

- For the Excess Failed Streets Method, excavation in City streets costs the City between \$6.88 and \$10.73 per square foot. See attached Exhibit 6.
- For the PMMS Method, excavation in City streets costs the City between \$7.03 and \$9.30 per square foot. See attached Exhibit 7.

As demonstrated by this partial update of the Economic Report, the Fee, the highest charge of which is only \$3.50 per square foot, continues to cover only a fraction of the costs incurred by the City as the result of excavation in City streets. Based upon the 1998-99 cost to the City to repave a block, a minimum Fee of \$6.88 per square feet of excavation would be justified.

More accurate cost estimates will be available after DPW has completed its biannual survey of the condition of City streets and inputted the 2000 PMMS Condition Scores into the 2000 PMMS database. Consequently, though DPW does not recommend changes to the Fee at this time, it may recommend such changes to the Board after completion of the survey.

V. RECOMMENDATION/CONCLUSION

DPW has had less than a year to implement and collect the Street Damage Restoration Fee. None of the Fee Funds have yet been committed to repaving or reconstruction of City streets. Additionally, while it is clear that the Fee continues to cover only a fraction of the costs incurred by the City as the result of excavation, a complete economic update cannot be conducted until DPW completes its bi-annual survey of the condition of City streets.

Consequently, DPW does not recommend changes to the Fee at this time. Instead, DPW will submit another report to the Board in twelve months, which will include the following:

- An update regarding the status of repaving and reconstruction completed using monies from the Fee Fund;
- A complete update of the calculations in the Economic Report; and
- Any recommendations for changes to the Fee structure or amount, and appropriate proposed legislation.



Average Cost per Square Foot to Repave a City Block



Resurfacing Contracts - Awarded FY 97-98

Based on original contract cost at time of award.

					Construction	Total	
			Resurfacing	Engineering	Management	Resurfacing	Project Area
JO No.	Title	Date Paved	Contract Cost*	Design Cost	Cost	Cost	(st)
051N	Diamond & 25th Sts. P/R	9/1/97	\$ 328,279	42,676	25,807	426,763	242,130
083N	Lyon St. & Presidio Ave. P/R	86/08/9	\$ 436,482	56,743	74,202	567,427	306,900
1277N	Various Locations: As Needed Paving	1/31/98	\$ 648,475	84,302	110,241	843,018	140'18
1322N	9th, 16th, Cabrillo Sts. P/R	3/22/98	\$ 581,628	75,612	228'86	756,116	000'089
7181E	Bernal Heights St. Improvement Brewster/Joy Area	26/08/6	\$ 354,840	46,129	60,323	461,292	74,400
		Total	\$ 2,349,704	\$ 305,462	\$ 399,450	\$ 3,054,615	1,334,501

Average Cost \$ 2.29 per square foot

Resurfacing Contracts - Awarded FY 98-99

Based on original contract cost at time of award.

					Construction	Total	
			Resurfacing	Engineering	Management	Resurfacing	Project Area
JO No.	Title	Date Paved	Contract Cost*	Design Cost	Cost	Cost	(sf)
1091N	Track Removal TDA 94-95	12/30/98	\$ 256,946	33,403	43,681	334,030	149,300
1281N	Various Locations Hunters Pt. District P/R	7/12/97	\$ 809,428	105,226	137,603	1,052,256	548,562
1373N	Lower Great Highway, 46th and 48th Ave. P/R	11/1/98	\$ 753,380	626'26	128,075	979,394	753,525
1453N	Kearny, Montgomery, Sacramento Sts. P/R	4/18/99	\$ 792,907	103,078	134,794	1,030,779	129,550
1454N	Potrero District Track Removal	4/1/99	\$ 538,554	70,012	91,554	700,120	277,946
1459N	Fillmore St., Broadway to Eddy P/R	11/1/98	\$ 478,545	62,211	81,353	622,109	168,870
7223E	Oakdale St. Bridge Replacment	7/15/98	\$ 349,559	45,443	59,425	454,427	47,856
		Total	\$ 3.979.319	\$ 517.311	\$ 676.484	\$ 5.173.115	2.075.609

Average Cost \$ 2.49 per square foot

Includes roadway and traffic routing bid items only.
 Track removal, curb ramps, and other works not pertaining to roadway resurfacing are excluded.



Discount Rate



POOLED CASH INVESTMENTS ALLOCATION FACTOR JULY 1998 TO JUNE 1999

The Desire		
FISCAL MON	NTH	INTEREST EARNED ALLOCATION FACTOR
JULY	1998	0.00447973396
AUGUST	1998	0.00494029032
SEPTEMBER	1998	0.00454670611
OCTOBER	1998	0.00499853423
NOVEMBER	1998	0.00402094546
DECEMBER	1998	0.00472008328
JANUARY	1999	0.00450895614
FEBRUARY	1999	0.00447851102
MARCH	1999	0.00502650875
APRIL	1999	0.00385468817
MAY	1999	0.00461084698
JUNE	1999	0.00458707135
TOTALS		0.05477287577



Yearly Excavation



Bureau of Street-Use & Mapping

DEPARTMENT OF PUBLIC WORKS

San Francisco, California 94103-0942 Rm. 410, 875 Stevenson Street

Square Feet of Excavation in Asphalt Streets

Fiscal Year	S	Square footage of Tre	age of Trench			Block & Permit Info	rmit Info.		
F	Sidewalk	Sidewalk	Total Area	Sq. Feet	Sidewalk & Concrete St.	Concrete St.	Total Permits	Sidewalk	Total #
	Only Sq.Ft.	% Area	Permitted	AC	No. of Permits for	# of Blocks for	Issued	% of Permits	of Blocks
96/56	38,754	%9	620,150	581,396	704	787	3,197	22%	
26/96	35,231	%9	617,260	582,029	710	786	3,064	23%	
86/26	52,423*	%/	720,150	667,727	722	792	3,162	23%	
98/99	158228.5**	30%	522,997	397,772	N/A	3874	2973	A/N	6108

*Note-This figure also includes roadway work. It may be more accurate to assume 6% of Total square footage is sidewalk work. **Note-These figures include concrete streets work also.



Excess Failed Streets Method Calculated at \$2.29 per Square Foot



Excess Failed Streets (EFS) Method

Age in 1997	0 to 5	6 to 10	10 to 15	16 to 20	total under 20	21 and over	total system
1 Number of blocks in sample							
2 No cuts	1248	373	232	75	1928	222	2150
3 Few cuts	399	271	331	97	1098	228	1326
4 Some cuts	246	451	669	232	1598	691	2289
5 Many cuts	53	127	295	105	580	580	1160
6 Total blocks cut	698	849	1295	434	3276	1499	4775
7 Total all blocks	1946	1222	1527	509	5204	1721	6925
8 Number of blocks with Condition	Score Below 5	3 ("Repavin	g Candidate	<u>s")</u>			
9 No cuts	39	59	84	27	209	79	288
10 Few cuts	31		. 120	59	267	121	388
11 Some cuts	37	186	325	161	709	491	1200
12 Many cuts	15	58	200	88	361	519	880
13 Total blocks cut	83	301	645	308	1337	1131	2468
14 Total all blocks	122	360	729	335	1546	1210	2756
15 Percentage of blocks that are Rep	aving Candida	tes					
16 No cuts	3.1%	15.8%	36.2%	36.0%	10.8%	35.6%	13.4%
17 Few cuts	7.8%	21.0%	36.3%	60.8%	24.3%	53.1%	29.3%
18 Some cuts	15.0%	41.2%	48.6%	69.4%	44.4%	71.1%	52.4%
19 Many cuts	28.3%	45.7%	67.8%	83.8%	62.2%	89.5%	75.9%
20 Total blocks cut	11.9%	35.5%	49.8%	71.0%		80.7%	
21 Percentage of blocks that are Rep	aving Candida	tes due to e	xcavation (Excess Re	paving Candid	ates")	
22 No cuts	0.0%	0.0%	0.0%	0.0%		0.0%	
23 Few cuts	4.6%	5.2%	0.0%	24.8%		17.5%	
24 Some cuts	11.9%	25.4%	12.4%	33.4%		35.5%	
25 Many cuts	25.2%	29.9%	31.6%	47.8%		53.9%	
26 Total blocks cut	8.8%	19.6%	13.6%	35.0%		45.1%	
27 Number of blocks that are Excess	Repaying Can	<u>didates</u>					
28 No cuts	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29 Few cuts	19	14	0	24	57	40	97
30 Some cuts	29	115	83	77	304	245	549
31 Many cuts	13	38	93	50	195	313	507
32 Total blocks cut	61	167	176	152	556	598	1153
33 Total # of Excess Repaving Candida	tes in Sample				556		1153
34 Percent of Blocks that are Excess Re		ates			10.7%	34.7%	16.7%
35 Total number of city blocks					11,528		11,528
36 Total # of Excess Repaving Candida	tes generalized	to all City ble	ocks		1,231		1,920
37 Average size of block in square feet					16,875		16,875
38 Average cost of paving per square for	oot				\$2.29		\$2.29
39 Average cost of repaving per block 40 Total Repaving Cost (\$'000)					\$38,644 \$ 47,577	,	\$38,644 \$ 74,195
41 Discount rate					5.48%		5.48%
42 Average repaving cycle (years)					26		26
43 Annualization factor over average ra	te of repaving				7.30%		7.30%
44 Annual Repaving Cost (\$'000)					\$ 3,475		\$ 5,420
45 Thousand square feet cut per year					549.2		549.2
46 Square Foot Cost					\$ 6.33		\$ 9.87



PMMS Method Calculated at \$2.29 per Square Foot



PMMS Method

Age in 1997	0 to 5	6 to 10	10 to 15	16 to 20	lotal under 20	21 and over	total system
1 Number of blocks in sample							
2 No cuts	1248	3 373	232	75	1928	222	2150
3 Few cuts	399	271	331	97	1098	228	1326
4 Some cuts	246	3 451	669	232	1598	691	2289
5 Many cuts	53	3 127	295	105	580	580	1160
6 Total blocks cut	698	849	1295	434	3276	1499	4775
7 Total all blocks	1946	1222	1527	509	5204	1721	6925
8 Number of blocks requiring repaving							
9 No cuts	170				542	117	659
10 Few cuts	124				583	152	735
11 Some cuts	102				1084	554	1638
12 Many cuts	22				444	516	960
13 Total blocks cut	248				2111	1222	3333
14 Total all blocks	418	729	1147	359	2653	1339	3992
15 Percentage of blocks that are Repay							
16 No cuts	13.6%	51.5%	64.7%	40.0%	28.1%	52.7%	30.7%
17 Few cuts	31.1%	57.6%	70.7%	71.1%	53.1%	66.7%	55.4%
18 Some cuts	41.5%	64.1%	77.9%	74.1%	67.8%	80.2%	71.6%
19 Many cuts	41.5%	72.4%	82.0%	83.8%	76.6%	89.0%	82.8%
20 Total blocks cut	35.5%	63.3%	77.0%	75.8%		89.3%	
21 Percentage of blocks that are Repay	ing Candida	tes due to e	xcavation ("Excess Repay	ring Candidates	<u>")</u>	
22 No cuts	0.0%	0.0%	0.0%	0.0%		0.0%	•
23 Few cuts	17.5%	6.1%	6.0%	31.1%		14.0%	
24 Some cuts	27.8%	12.6%	13.2%	· 34.1%		27.5%	
25 Many cuts	27.9%	21.0%	17.4%	43.8%		36.3%	
26 Total blocks cut	21.9%	11.8%	12.3%	35.8%		36.6%	
27 Number of blocks that are Excess R	epaving Can	didates					
28 No cuts	C) 0	0	0	0	0	0
29 Few cuts	70) 17	20	30	136	32	168
30 Some cuts	68	57	88	79	293	190	483
31 Many cuts	15	5 27	51	46	139	210	34 9
32 Total blocks cut	153	100	160	155	568	432	1000
33 Total # of Excess Repaying Candidate	s in Sample				568		1000
34 Percent of Blocks that are Excess Rep	aving Candid	lates			10.9%	25.1%	14.4%
35 Total number of city blocks					11,528		11,528
36 Total # of Excess Repaving Candidate	s generalized	I to all City bi	ocks		1,258.3		1,664.7
37 Average size of block in square feet					16,875		16,875
38 Average cost of paving per square foo	t				\$2.29		\$2.29
39 Average cost of repaving per block					\$38,644		\$38,644
40 Total Repaving Cost (\$'000)	¥				\$ 48,625		\$ 64,330
41 Discount rate					5.48%		5.48%
42 Average repaving cycle (years)					26		26
43 Annualization factor over average rate	of repaving				7.30%		7.30%
44 Annual Repaving Cost (\$'000)					\$ 3,552		\$ 4,699
45 Thousand square feet cut per year					549.2		549.2
46 Square Foot Cost					\$ 6.47		\$ 8.56



EXHIBIT 6

Excess Failed Streets Method Calculated at \$2.49 per Square Foot



Excess Failed Streets (EFS) Method

Ano in 1007	0.4-5	0.4 40	40 to 45	40.45.00	4-4-1 00	24	
Age in 1997	0 to 5	6 to 10	10 to 15	16 to 20	total under 20	21 and over	total system
1 Number of blocks in sample							
2 No cuts	1248				1928	222	2150
3 Few cuts	399	271	331	97	1098	228	1326
4 Some cuts	246					691	2289
5 Many cuts	53					580	1160
6 Total blocks cut	698				3276	1499	4775
7 Total all blocks	1946	1222	1527	509	5204	1721	6925
8 Number of blocks with Condition S	Score Below 5	3 ("Repavin	g Candidate	<u>es")</u>			
9 No cuts	39	59	84	27	209	79	288
10 Few cuts	31	57	120	59	267	121	388
11 Some cuts	37	186	325	161	709	491	1200
12 Many cuts	15		200	88	361	519	880
13 Total blocks cut	83		645	308	1337	1131	2468
14 Total all blocks	122	360	729	335	1546	1210	2756
15 Percentage of blocks that are Repa	aving Candida	<u>tes</u>					
16 No cuts	3.1%	15.8%	36.2%	36.0%	10.8%	35.6%	13.4%
17 Few cuts	7.8%	21.0%	36.3%	60.8%	24.3%	53.1%	29.3%
18 Some cuts	15.0%	41.2%	48.6%	69.4%	44.4%	71.1%	52.4%
19 Many cuts	28.3%	45.7%	67.8%	83.8%	62.2%	89.5%	75.9%
20 Total blocks cut	11.9%	35.5%	49.8%	71.0%		80.7%	
21 Percentage of blocks that are Repa	avlng Candida	tes due to e	xcavation (Excess Re	paving Candid	ates")	
22 No cuts	0.0%	0.0%	0.0%	0.0%		0.0%	
23 Few cuts	4.6%	5.2%	0.0%	24.8%		17.5%	
24 Some cuts	11.9%	25.4%	12.4%	33.4%		35.5%	
25 Many cuts	25.2%	29.9%	31.6%	47.8%		53.9%	
26 Total blocks cut	8.8%	19.6%	13.6%	35.0%		45.1%	
27 Number of blocks that are Excess	Repaving Can	didates					
28 No cuts	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29 Few cuts	19	14	0	24	57	40	97
30 Some cuts	29	115	83	77	304	245	549
31 Many cuts	13	38	93	50	195	313	507
32 Total blocks cut	61	167	176	152	556	598	1153
33 Total # of Excess Repaying Candidat	tes in Samole				556		1153
34 Percent of Blocks that are Excess Repaving Candidates						34.7%	16.7%
35 Total number of city blocks					11,528		11,528
36 Total # of Excess Repaving Candidat	tes generalized	to all City bl	ocks		1,231		1,920
37 Average size of block in square feet					16,875		16,875
38 Average cost of paving per square for	ot				\$2.49		\$2.49
39 Average cost of repaving per block 40 Total Repaving Cost (\$'000)					\$42,019 \$ 51,732		\$42,019 \$ 80,675
41 Discount rate					5.48%		5.48%
42 Average repaving cycle (years)43 Annualization factor over average rat	e of renaving				26 7.30%		26 7.30%
	o or repaying						
44 Annual Repaying Cost (\$'000)					\$ 3,779		\$ 5,893
45 Thousand square feet cut per year					549.2		549.2
46 Square Foot Cost					\$ 6.88		\$ 10.73



EXHIBIT 7

PMMS Method Calculated at \$2.49 per Square Foot



PMMS Method

Number of blocks in sample 2 No cuts 1248 373 232 75 1928 222 1526 35 600 1260 15	Age in 1997	0 to 5	6 to 10	10 to 15	16 to 20	total under 20	21 and over	total system
2 No cuts	1 Number of blocks in sample							
3 Few cuts		1248	373	232	. 75	1928	222	2150
Some cuts	3 Few cuts	399	271	331	97			
6 float blocks cut 7 Total all blocks 1946 1222 1527 509 5204 1271 6825 8 Number of blocks requiring repaving In PMMS Model ("Repaving Candidates") 9 No cuts 170 192 150 30 542 117 659 10 Few cuts 102 289 521 172 1084 554 1638 12 Many cuts 22 92 242 88 444 516 960 13 Total blocks cut 248 537 997 329 21111 122 3333 14 Total all blocks 3 148 729 1147 359 2653 1339 3992 15 Percentage of blocks that are Repaving Candidates 16 No cuts 13.6% 51.5% 64.7% 40.0% 28.1% 52.7% 30.7% 17 Few cuts 3 1.1% 57.6% 70.7% 71.1% 53.1% 66.7% 55.4% 18 Some cuts 3 11.5% 72.4% 82.0% 83.3% 76.6% 80.2% 71.6% 19 Many cuts 4 1.5% 64.1% 77.9% 74.1% 67.8% 80.2% 71.6% 20 Total blocks cut 3 5.5% 63.3% 77.0% 75.8% 89.3% 21 Percentage of blocks that are Repaving Candidates tue to excavation ("Excess Repaving Candidates") 22 No cuts 17.5% 6.1% 6.0% 31.1% 14.0% 24 Some cuts 18.6% 6.1% 6.1% 6.0% 31.1% 14.0% 25 Some cuts 1	4 Some cuts	246	451	669	232	1598		
Number of blocks	5 Many cuts	53	127	295	105	580	580	1160
8 Number of blocks requiring repaving in PMMS Model ("Repaving Candidates") 9 No cuts 170 192 150 30 542 117 659 10 Few cuts 124 156 234 69 583 152 735 11 Some cuts 102 299 521 172 1084 554 1638 12 Many cuts 22 92 242 88 444 516 960 13 Total blocks cut 248 537 997 329 2111 1222 3333 14 Total all blocks 1418 729 1147 359 2653 1339 3992 15 Percentage of blocks that are Repaving Candidates 16 No cuts 13,6% 51,5% 64,7% 40,0% 28,1% 52,7% 30,7% 66,7% 55,4% 18 Some cuts 13,1% 57,6% 70,7% 71,1% 53,1% 66,7% 55,4% 18 Some cuts 14,5% 64,1% 77,9% 74,1% 67,8% 80,2% 71,6% 19 Many cuts 41,5% 72,4% 82,0% 83,8% 76,6% 89,0% 82,8% 20 Total blocks cut 35,5% 63,3% 77,0% 75,3% 68,93% 22 Few cuts 17,5% 64,6% 60,0% 0,0% 0,0% 0,0% 0,0% 0,0% 0,0%	6 Total blocks cut	698	849	1295	434	3276	1499	4775
9 No cuts	7 Total all blocks	1946	1222	1527	509	5204	1721	6925
10 Few cuts 124 156 234 69 583 152 735 11 Some cuts 102 289 521 172 1084 554 1638 12 Many cuts 22 92 242 88 444 516 960 13 Total blocks out 248 537 997 329 2111 1222 3333 14 Total all blocks 14 18 729 1147 359 2653 1339 3992 15 Fercentage of blocks that are Repaving Candidates 16 No cuts 13.6% 51.5% 64.7% 40.0% 28.1% 52.7% 30.7% 17 Few cuts 31.1% 57.6% 70.7% 71.1% 53.1% 66.7% 55.4% 18 Some cuts 41.5% 72.4% 82.0% 83.8% 76.6% 89.0% 82.8% 19 Many cuts 41.5% 72.4% 82.0% 83.8% 76.6% 89.0% 82.8% 20 Total blocks cut 35.5% 63.3% 77.0% 75.8% 89.3% 21 Fercentage of blocks that are Repaving Candidates								
11 Some cuts 102 289 521 172 1084 554 1038 12 Many cuts 22 92 242 88 444 516 960 960 973 329 2111 1222 3333 14 Total all blocks cut 248 557 997 329 2111 1222 3333 3992 15 Percentage of blocks that are Repaving Candidates 13.6% 51.5% 64.7% 40.0% 28.1% 52.7% 30.7% 17 Few cuts 31.1% 57.6% 70.7% 71.1% 53.1% 66.7% 55.4% 18 50me cuts 31.1% 57.6% 77.9% 74.1% 67.8% 80.2% 71.6% 18 50me cuts 41.5% 64.4% 77.9% 74.1% 67.8% 80.2% 71.6% 18 50me cuts 41.5% 63.3% 77.0% 75.8% 89.3% 76.6% 89.3% 20 Total blocks cut 35.5% 63.3% 77.0% 75.8% 89.3% 21 Percentage of blocks that are Repaving Candidates due to excavation ("Excess Repaving Candidates") 22 No cuts 17.5% 61.1% 60.0% 31.1% 14.0% 24 Some cuts 27.8% 12.6% 13.2% 34.1% 27.5% 25 Many cuts 27.9% 21.6% 13.2% 35.8% 36.3% 27.5% 21.6% 21.3% 35.8% 36.3% 27.5% 21.6% 21.3% 35.8% 36.3% 27.5% 21.6% 21.3% 21.3% 35.8% 36.6% 27.5% 21.6% 21.3% 21.3% 35.8% 36.6% 27.5% 21.3% 2								659
12 Many cuts 22 92 242 88 444 516 860 13 Total blocks cut 248 537 997 329 2111 1222 3333 3992 14 Total all blocks 418 729 1147 359 2653 1339 3992 15 Percentage of blocks that are Repaving Candidates 16 No cuts 3.1.5% 51.5% 64.7% 40.0% 28.1% 52.7% 30.7% 16 No cuts 3.1.5% 51.5% 64.7% 70.7% 71.1% 53.1% 66.7% 55.4% 18 Some cuts 41.5% 64.1% 77.9% 74.1% 67.8% 80.2% 71.6% 19 Many cuts 41.5% 64.1% 77.9% 77.0% 75.8% 80.2% 71.6% 19 Many cuts 41.5% 63.3% 77.0% 75.8% 82.0% 83.8% 76.6% 89.0% 82.8% 20 Total blocks cut 35.5% 63.3% 77.0% 75.8% 82.0% 83.8% 76.6% 89.0% 82.8% 20 Total blocks cut 35.5% 63.3% 77.0% 75.8% 82.0% 83.8% 76.6% 89.0% 82.8% 20 Total blocks cut 32.5% 63.3% 77.0% 75.8% 82.0% 83.8% 76.6% 89.0% 82.8% 20 Total blocks cut 32.5% 63.3% 77.0% 75.8% 82.0% 83.8% 76.6% 89.0% 82.8% 20 Total blocks cut 32.5% 63.3% 77.0% 75.8% 82.0% 83.8% 76.6% 89.0% 82.8% 20 Total blocks cut 32.5% 63.3% 77.0% 33.1% 14.0% 22.5% 22.5% 24.5								
13 Total blocks cut 14 Total all blocks 14 Total all blocks 14 Total all blocks 14 Total all blocks 15 Percentage of blocks that are Repaving Candidates 16 No cuts 13.6% 51.5% 64.7% 40.0% 28.1% 52.7% 30.7% 17 Few cuts 13.6% 57.6% 70.7% 71.1% 53.1% 66.7% 55.4% 18 Some cuts 14.15% 64.1% 77.9% 74.1% 67.8% 80.2% 71.6% 19 Many cuts 14.15% 64.1% 77.9% 74.1% 67.8% 80.2% 71.6% 20 Total blocks cut 13.5.% 63.3% 77.0% 75.8% 89.3% 21 Percentage of blocks that are Repaving Candidates but to excavation ("Excess Repaving Candidates") 22 No cuts 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 23 Few cuts 17.5% 6.1% 6.0% 31.1% 14.0% 24 Some cuts 27.8% 12.6% 13.2% 34.1% 27.5% 25 Many cuts 27.9% 21.0% 17.4% 43.8% 36.3% 26 Total blocks cut 27.9% 21.0% 17.4% 43.8% 36.3% 36.6% 27 Number of blocks that are Excess Repaving Candidates to 21.9% 11.8% 12.3% 35.8% 36.6% 28 No cuts 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0								
14 Total all blocks								
15 Percentage of blocks that are Repaving Candidates 13.6% 51.5% 64.7% 40.0% 28.1% 52.7% 30.7% 17 Few cuts 31.1% 57.6% 70.7% 71.1% 53.1% 66.7% 55.4% 18 Some cuts 41.5% 64.1% 77.9% 74.1% 67.8% 80.2% 71.6% 19 Many cuts 41.5% 64.1% 77.9% 74.1% 67.8% 80.2% 71.6% 19 Many cuts 41.5% 64.7% 82.0% 83.8% 76.6% 89.9% 82.8% 80.2%								
16 No cuts	14 Total all Diocks	418	729	1147	359	2653	1339	3992
17 Few cuts								
18 Some cuts		13.6%	51.5%	64.7%	40.0%	28.1%	52.7%	30.7%
19 Many cuts	17 Few cuts	31.1%	57.6%	70.7%	71.1%	53.1%	66.7%	55.4%
Percentage of blocks that are Repaving Candidates Ue to excavation ("Excess Repaving Candidates") 20 No cuts 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 21 Few cuts 17.5% 6.1% 6.0% 31.1% 14.0% 22 None cuts 27.9% 12.6% 13.2% 34.1% 27.5% 25 Many cuts 27.9% 21.0% 17.4% 43.8% 36.3% 26 Total blocks cut 21.9% 11.8% 12.3% 35.8% 36.6% 27 Number of blocks that are Excess Repaving Candidates 28 No cuts 0	18 Some cuts	41.5%	64.1%	77.9%	74.1%	67.8%	80.2%	71.6%
Percentage of blocks that are Repaving Candidates due to excavation ("Excess Repaving Candidates") 22 No cuts 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 23 Few cuts 17.5% 6.1% 6.0% 31.1% 14.0% 24 Some cuts 27.9% 12.6% 13.2% 34.1% 27.5% 25 Many cuts 27.9% 21.0% 17.4% 43.8% 36.3% 26 Total blocks cut 21.9% 11.8% 12.3% 35.8% 36.6% 27 Number of blocks that are Excess Repaving Candidates 28 No cuts 0 0 0 0 0 0 0 29 Few cuts 70 17 20 30 136 32 168 30 Some cuts 68 57 88 79 293 190 483 31 Many cuts 15 27 51 46 139 210 349 32 Total blocks cut 153 100 160 155 568 432 1000 33 Total # of Excess Repaving Candidates in Sample 568 1000 34 Percent of Blocks that are Excess Repaving Candidates generalized to all City blocks 11.528 11.528 36 Total # of Excess Repaving Candidates generalized to all City blocks 1258.3 1.664.7 37 Average cost of paving per square foot \$2.49 \$42.019 39 Average cost of paving per square foot \$2.49 \$42.019 30 Average cost of paving per square foot \$2.49 \$42.019 30 Average cost of paving per square foot \$2.49 \$42.019 31 Average cost of paving per square foot \$42.019 \$42.019 34 Average repaving Cost (\$000) \$5.2871 \$69.949 35 Total Repaving Cost (\$000) \$5.2871 \$69.949 36 Total Repaving Cost (\$000) \$5.2871 \$69.949 37 Average repaving cost of repaving per block \$42.019 \$42.019 38 Average repaving cost of repaving ere block \$42.019 \$42.019 39 Average repaving cost of repaving ere block \$60.00	19 Many cuts	41.5%	72.4%	82.0%	83.8%	76.6%	89.0%	82.8%
22 No cuts	20 Total blocks cut	35.5%	63.3%	77.0%	75.8%		89.3%	
23 Few cuts 17.5% 6.1% 6.0% 31.1% 14.0% 24 Some cuts 27.8% 12.6% 13.2% 34.1% 27.5% 25 Many cuts 27.9% 21.0% 17.4% 43.8% 36.3% 26 Total blocks cut 21.9% 11.8% 12.3% 35.8% 36.6% 27 Number of blocks that are Excess Repaving Candidates 28 No cuts 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	21 Percentage of blocks that are Rep	aving Candida	tes due to e	xcavation ("Excess Repa	ving Candidates	<u>:")</u>	
24 Some cuts 27.8% 12.6% 13.2% 34.1% 27.5% 25 Many cuts 27.9% 21.0% 17.4% 43.8% 36.3% 26 Total blocks cut 21.9% 11.8% 12.3% 35.8% 36.6% 27 Number of blocks that are Excess Repaving Candidates 28 No cuts 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	22 No cuts	0.0%	0.0%	0.0%	0.0%		0.0%	
25 Many cuts 27.9% 21.0% 17.4% 43.8% 36.3% 36.6% 26 Total blocks cut 21.9% 11.8% 12.3% 35.8% 36.6% 27 Number of blocks that are Excess Repaving Candidates 28 No cuts 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	23 Few cuts	17.5%	6.1%	6.0%	31.1%		14.0%	
26 Total blocks cut 21.9% 11.8% 12.3% 35.8% 36.6% 27 Number of blocks that are Excess Repaving Candidates 0	24 Some cuts	27.8%	12.6%	13.2%	34.1%		27.5%	
Number of blocks that are Excess RepayIng Candidates 28 No cuts 0 0 0 0 0 0 0 0 0	25 Many cuts	27.9%	21.0%	17.4%	43.8%		36.3%	
28 No cuts 0 0 0 0 0 0 0 29 Few cuts 70 17 20 30 136 32 168 30 Some cuts 68 57 88 79 293 190 483 31 Many cuts 15 27 51 46 139 210 349 32 Total blocks cut 153 100 160 155 568 432 1000 33 Total # of Excess Repaving Candidates in Sample 568 1000 25.1% 14.4% 35 Total number of city blocks 11,528 11,528 11,528 36 Total # of Excess Repaving Candidates generalized to all City blocks 11,528 11,528 36 Total # of Excess Repaving Candidates generalized to all City blocks 1,258.3 1,664.7 37 Average size of block in square feet 16,875 16,875 38 Average cost of paving per square foot \$2.49 \$2.49 39 Average cost of repaving Cost (\$'000) \$52,871 \$69,949 41 Discount rate 5,48% 26 </td <td>26 Total blocks cut</td> <td>21.9%</td> <td>11.8%</td> <td>12.3%</td> <td>35.8%</td> <td></td> <td>36.6%</td> <td></td>	26 Total blocks cut	21.9%	11.8%	12.3%	35.8%		36.6%	
29 Few cuts 70 17 20 30 136 32 168 30 Some cuts 68 57 88 79 293 190 483 31 Many cuts 15 27 51 46 139 210 349 32 Total blocks cut 153 100 160 155 568 432 1000 33 Total # of Excess Repaving Candidates in Sample 568 1000 34 Percent of Blocks that are Excess Repaving Candidates 10.9% 25.1% 14.4% 35 Total number of city blocks 11,528 11,528 36 Total # of Excess Repaving Candidates generalized to all City blocks 1,258.3 1,664.7 37 Average size of block in square feet 16,875 16,875 38 Average cost of paving per square foot \$2.49 \$2.49 \$2.49 39 Average cost of repaving per block \$42,019 \$42,019 40 Total Repaving Cost (\$'000) \$52,871 \$69,949 41 Discount rate 5.48% 5.48% 42 Average repaving cycle (years) 26 26 26 43 Annualization factor over average rate of repaving \$3,862 \$5,109 45 Thousand square feet cut per year 549.2	27 Number of blocks that are Excess	Repaving Can	didates					
30 Some cuts 68 57 88 79 293 190 483 31 Many cuts 15 27 51 46 139 210 349 32 Total blocks cut 153 100 160 155 568 432 1000 33 Total # of Excess Repaving Candidates in Sample 568 10.9% 25.1% 14.4% 34 Percent of Blocks that are Excess Repaving Candidates 10.9% 25.1% 14.4% 35 Total number of city blocks 11,528 11,528 36 Total # of Excess Repaving Candidates generalized to all City blocks 1,258.3 1,664.7 37 Average size of block in square feet 16,875 16,875 38 Average cost of paving per square foot \$2.49 \$2.49 39 Average cost of repaving per block \$42,019 \$42,019 40 Total Repaving Cost (\$'000) \$52,871 \$69,949 41 Discount rate 5,48% 5,48% 42 Average repaving cycle (years) 26 26 43 Annualization factor over average rate of repaving 7,30% 7,30% 44 Annual Repaving Cost (\$'000) \$3,862 \$5,109 45 Thousand square feet cut per year 549.2	28 No cuts	0	0	0	0	0	0	0
31 Many cuts 15 27 51 46 139 210 349 32 Total blocks cut 153 100 160 155 568 432 1000 33 Total # of Excess Repaving Candidates in Sample 568 1000 34 Percent of Blocks that are Excess Repaving Candidates 10.9% 25.1% 14.4% 35 Total number of city blocks 11,528 11,528 11,528 36 Total # of Excess Repaving Candidates generalized to all City blocks 1258.3 1,664.7 37 Average size of block in square feet 16,875 16,875 38 Average cost of paving per square foot \$2.49 \$2.49 39 Average cost of repaving per block \$42,019 \$42,019 40 Total Repaving Cost (\$'000) \$52,871 \$69,949 41 Discount rate 5.48% 5.48% 42 Average repaving cycle (years) 26 26 43 Annualization factor over average rate of repaving 7.30% 7.30% 44 Annual Repaving Cost (\$'000) \$3,862 \$5,109 45 Thousand square feet cut per year 549.2	29 Few cuts	70	17	20	30	136	32	168
32 Total blocks cut 153 100 160 155 568 432 1000 33 Total # of Excess Repaving Candidates in Sample 568 1000 34 Percent of Blocks that are Excess Repaving Candidates 10.9% 25.1% 14.4% 35 Total number of city blocks 11,528 11,528 36 Total # of Excess Repaving Candidates generalized to all City blocks 11,528 11,528 36 Total # of Excess Repaving Candidates generalized to all City blocks 11,528 11,528 36 Total # of Excess Repaving Candidates generalized to all City blocks 11,528 11,528 36 Total # of Excess Repaving Candidates generalized to all City blocks 11,528 11,528 36 Total # of Excess Repaving Candidates generalized to all City blocks 12,528.3 1,664.7 37 Average size of block in square feet \$2.49 \$2.49 \$2.49 38 Average cost of paving per square foot \$42,019 \$42,019 \$42,019 39 Average cost of repaving Cost (\$000) \$52,871 \$69,949 41 Discount rate 5.48% 5.48% 42 Average repaving cycle (years) 26 26 43 Annualization factor over average rate of repaving 7.30% <t< td=""><td>30 Some cuts</td><td>68</td><td>57</td><td>88</td><td>79</td><td>293</td><td>190</td><td>483</td></t<>	30 Some cuts	68	57	88	79	293	190	483
32 Total blocks cut 153 100 160 155 568 432 1000 33 Total # of Excess Repaving Candidates in Sample 568 1000 34 Percent of Blocks that are Excess Repaving Candidates 10.9% 25.1% 14.4% 35 Total number of city blocks 11,528 11,528 36 Total # of Excess Repaving Candidates generalized to all City blocks 11,528 11,528 37 Average size of block in square feet 16,875 16,875 38 Average cost of paving per square foot \$2.49 \$2.49 39 Average cost of repaving per block \$42,019 \$42,019 40 Total Repaving Cost (\$000) \$52,871 \$69,949 41 Discount rate 5.48% 5.48% 42 Average repaving cycle (years) 26 26 43 Annualization factor over average rate of repaving 7.30% 7.30% 44 Annual Repaving Cost (\$'000) \$3,862 \$5,109 45 Thousand square feet cut per year 549.2	31 Many cuts	15	27	51	46	139	210	34 9
34 Percent of Blocks that are Excess Repaving Candidates 10.9% 25.1% 14.4% 35 Total number of city blocks 11,528 11,528 36 Total # of Excess Repaving Candidates generalized to all City blocks 1,258.3 1,664.7 37 Average size of block in square feet 16,875 16,875 38 Average cost of paving per square foot \$2.49 \$2.49 39 Average cost of repaving per block \$42,019 \$42,019 40 Total Repaving Cost (\$'000) \$52,871 \$69,949 41 Discount rate 5.48% 5.48% 42 Average repaving cycle (years) 26 26 43 Annualization factor over average rate of repaving 7.30% 7.30% 44 Annual Repaving Cost (\$'000) \$3,862 \$5,109 45 Thousand square feet cut per year 549.2 549.2		153	100	160	155	568	432	1000
34 Percent of Blocks that are Excess Repaving Candidates 10.9% 25.1% 14.4% 35 Total number of city blocks 11,528 11,528 36 Total # of Excess Repaving Candidates generalized to all City blocks 1,258.3 1,664.7 37 Average size of block in square feet 16,875 16,875 38 Average cost of paving per square foot \$2.49 \$2.49 39 Average cost of repaving per block \$42,019 \$42,019 40 Total Repaving Cost (\$'000) \$52,871 \$69,949 41 Discount rate 5.48% 5.48% 42 Average repaving cycle (years) 26 26 43 Annualization factor over average rate of repaving 7.30% 7.30% 44 Annual Repaving Cost (\$'000) \$3,862 \$5,109 45 Thousand square feet cut per year 549.2 549.2	33 Total # of Excess Renaving Candida	ites in Sample				568		1000
36 Total # of Excess Repaving Candidates generalized to all City blocks 1,258.3 1,664.7 37 Average size of block in square feet 16,875 16,875 38 Average cost of paving per square foot \$2.49 \$2.49 39 Average cost of repaving per block \$42,019 \$42,019 40 Total Repaving Cost (\$'000) \$52,871 \$69,949 41 Discount rate 5.48% 5.48% 42 Average repaving cycle (years) 26 26 43 Annualization factor over average rate of repaving 7.30% 7.30% 44 Annual Repaving Cost (\$'000) \$3,862 \$5,109 45 Thousand square feet cut per year 549.2 549.2		•	ates				25.1%	
37 Average size of block in square feet 16,875 16,875 38 Average cost of paving per square foot \$2.49 \$2.49 39 Average cost of repaving per block \$42,019 \$42,019 40 Total Repaving Cost (\$'000) \$52,871 \$69,949 41 Discount rate 5.48% 5.48% 42 Average repaving cycle (years) 26 26 43 Annualization factor over average rate of repaving 7.30% 7.30% 44 Annual Repaving Cost (\$'000) \$3,862 \$5,109 45 Thousand square feet cut per year 549.2 549.2	35 Total number of city blocks					11,528		11,528
38 Average cost of paving per square foot \$2.49 \$2.49 39 Average cost of repaving per block \$42,019 \$42,019 40 Total Repaving Cost (\$'000) \$52,871 \$69,949 41 Discount rate 5.48% 5.48% 42 Average repaving cycle (years) 26 26 43 Annualization factor over average rate of repaving 7.30% 7.30% 44 Annual Repaving Cost (\$'000) \$3,862 \$5,109 45 Thousand square feet cut per year 549.2 549.2		ates generalized	to all City bl	ocks		1,258.3		1,664.7
39 Average cost of repaving per block \$42,019 \$42,019 40 Total Repaving Cost (\$'000) \$ 52,871 \$ 69,949 41 Discount rate 5.48% 5.48% 42 Average repaving cycle (years) 26 26 43 Annualization factor over average rate of repaving 7.30% 7.30% 44 Annual Repaving Cost (\$'000) \$ 3,862 \$ 5,109 45 Thousand square feet cut per year 549.2 549.2	37 Average size of block in square feet					16,875		16,875
40 Total Repaving Cost (\$'000) \$ 52,871 \$ 69,949 41 Discount rate 5.48% 5.48% 42 Average repaving cycle (years) 26 26 43 Annualization factor over average rate of repaving 7.30% 7.30% 44 Annual Repaving Cost (\$'000) \$ 3,862 \$ 5,109 45 Thousand square feet cut per year 549.2 549.2	-					\$2.49		\$2.49
41 Discount rate 5.48% 5.48% 42 Average repaving cycle (years) 26 26 43 Annualization factor over average rate of repaving 7.30% 7.30% 44 Annual Repaving Cost (\$'000) \$ 3,862 \$ 5,109 45 Thousand square feet cut per year 549.2 549.2	39 Average cost of repaving per block					\$42,019		\$42,019
42 Average repaving cycle (years) 26 26 43 Annualization factor over average rate of repaving 7.30% 7.30% 44 Annual Repaving Cost (\$'000) \$ 3,862 \$ 5,109 45 Thousand square feet cut per year 549.2 549.2	40 Total Repaving Cost (\$'000)					\$ 52,871		\$ 69,949
42 Average repaving cycle (years) 26 26 43 Annualization factor over average rate of repaving 7.30% 7.30% 44 Annual Repaving Cost (\$'000) \$ 3,862 \$ 5,109 45 Thousand square feet cut per year 549.2 549.2	41 Discount rate			•		5.48%		5.48%
43 Annualization factor over average rate of repaving 7.30% 7.30% 44 Annual Repaving Cost (\$'000) \$ 3,862 \$ 5,109 45 Thousand square feet cut per year 549.2 549.2	42 Average repaving cycle (years)					. 26		26
45 Thousand square feet cut per year 549.2 549.2		ite of repaving				7.30%		7.30%
	44 Annual Repaving Cost (\$'000)					\$ 3,862		\$ 5,109
46 Square Foot Cost \$ 7.03 \$ 9.30	45 Thousand square feet cut per year					549.2		549.2
	46 Square Foot Cost					\$ 7.03		\$ 9.30



City and County of San Francisco



Willie Lewis Brown, Jr., Mayor Mark A. Primeau, Architect, AIA, Director (415) 554-6920 FAX (415) 554-6944 http://www.sfdpw.com

Department of Public Works
Office of the Director
City Hall, Room 348
1 Dr. Carlton B. Goodlett Place
San Francisco, CA 94102-4645

December 20, 1999

hal

Ms. Gloria L. Young Clerk of the Board 1 Dr. Carlton B. Goodlett Place, Room 244 San Francisco, CA 94102-4532

Subject: Street Damage Restoration Fee Report

Dear Ms. Young: Gloma

DOCUMENTS DEPT.

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Public Works Code Section 2.4.45 requires the Director of the Department of Public Works ("DPW") to:

Within one (1) year after adoption of the Street Damage Restoration Fee, and every three (3) years thereafter, ... review the proceeds of the Street Damage Restoration Fee, the costs of repaving and reconstruction reasonably attributed to Excavation in City streets, and any other new information that shall become available, and prepare a report to the Board of Supervisors. Based upon the results of the review, the Director shall recommend to the Board of Supervisors any necessary adjustments to the Fee, along with written justification for the recommended adjustment and any necessary legislation.

The Street Damage Restoration Fee ("Fee") became effective December 13, 1998, thirty (30) days after the Mayor signed the ordinance. DPW began collecting the fee from excavators in January, 1999. In accordance with Code Section 2.4.45, I am transmitting to the Board of Supervisors the attached *Report on the Status of the Street Damage Restoration Fee* ("Report").

Proceeds

The Report contains information on the Fees collected by DPW from January 1, 1999 through November 30, 1999. During this period DPW has deposited approximately \$198,100 into the Street Damage Restoration Fund. DPW anticipates depositing an additional \$200,000 into the fund by the end of the calendar year.

DPW has not yet expended any of the Fee funds. It anticipates beginning to pave streets using monies from the Fee fund in the Spring of 2000.



Repaving and Reconstruction Costs

Prior to the Board's adoption of the Fee, DPW retained a consultant to prepare an economic report to quantify the repaving and reconstruction costs incurred by the City as the result of excavation in City streets. This economic report was presented to the Board for consideration when it adopted the Fee. The economic report demonstrated that the costs to the City caused by excavation are substantially higher that the amount of the Fee imposed on excavators. The attached Report includes an update to the economic report.

Adjustments to Fee

As demonstrated in the Report, the Fee continues to cover only a fraction of the costs incurred by the City as the result of excavation in City streets. More accurate cost estimates will be available after DPW has completed its bi-annual survey of the condition of City streets. Consequently, though I do not recommend changes to the Fee at this time, I may recommend such changes to the Board, next year, after the survey is completed.

If you or any Board member has any questions regarding the Report, please do not hesitate to call me or Cynthia Chono, Manager of the Street Construction Coordination Center. My number is (415) 554-6920 and Cynthia Chono's is (415) 554-6196.

Sincerely,

Attachment



